PHILOSOPHICAL TRANSACTIONS.

Munday, April 3. 1665.

The Contents.

Extract of a Letter, lately written from Rome, *touching the late Comet, and a New one.*

I Cannot enough wonder at the ſtrange agreement of the thoughts of that acute French Gentleman, Monſieur *Auzout*, in the *Hypotheſis* of the Comets motion, with mine; and particularly, at that of the *Tables*. I have with the ſame method, whereby I find the motion of this Comet, eaſily found the Principle of that Author's *Ephemerides*, which he then thought not fit to declare; and 'tis this, that this Comet moves about the *Great Dog*, in ſo great a Circle, that that portion, which is deſcribed,

bed, is exceeding ſmall in reſpect of the whole circumference thereof, and hardly diſtinguiſhable by us from a ſtreight line.

Concerning the New Comet you mention, I ſaw it on the 11. of *February*, about the 24. deg. of *Aries*, with a Northern latitude of 24. deg. 40. min. The cloudy weather hath not yet permitted me to ſee it in *Andromeda*, as others affirm to have done.

Extract of a Letter, written from Paris, *containing ſome Reflections on part of the precedent* Roman *Letter.*

As to the *Hypotheſis* of *Georg. Domenico Caſſini*, touching the motion of the *Comet* about the *Great Dog* in a Circle, whoſe Centre is in a ſtreight line drawn from the Earth thorough the ſaid Star, I believe it will ſhortly be publiſh'd in print, as a thought I lighted upon in diſcourſing with one of my Friends, who did maintain, that it turned about a Centre, becauſe that its *Perigee* had been over againſt the *Great Dog*, as I had noted in my *Ephemerides*. This particular I did long ſince declare to many of my acquaintance, whereof ſome or other will certainly do me that right, as to let the world know it by the Preſs. I have added an Obſervation, which I find not, that Signior *Caſſini* hath made, *viz.* that there was ground to think, that the *Comet* of 1652. was the ſame with the preſent, ſeeing that, beſides the parity of the ſwiftneſs of its motion, the *Perigee* thereof was alſo over againſt the *Great Dog*, if the Obſervations extant thereof, deceive not. But, to make it out, what ground I had for theſe thoughts, I ſaid, that if they were true, the Comet muſt needs accompliſh its revolution from 12. to 12. years, or thereabout. But, ſeeing it appears not by Hiſtory, that a Comet hath been ſeen at thoſe determinate diſtances of time, nor that over againſt the *Perigee* of all the other Comets, whereof particular obſervations are recorded, are alwaies found Stars of the firſt Magnitude, or ſuch others, as are very notable, beſides other reaſons, that might be alleged, I ſhall not purſue this ſpeculation; but rather

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